

Abstract

A grating is provided in an optical fiber for adjusting the wavelength of an output light from the optical resonator which consists
5 mainly of a semiconductor light emitting device and the optical fiber to be slightly shorter than a wavelength range of an input light where the wavelength range of an input light can be converted by a wavelength
10 conversion device. As the grating is adjustably expanded with a knob control being turned, the wavelength of the output light from the optical resonator is modified to be matched with the wavelength range of the input light
15 where the wavelength of the input light can be converted by the wavelength conversion device. Any change in the center wavelength of the input light wavelength range where the wavelength of the input light can be converted
20 by the wavelength conversion device which results from a variation in the temperature can be counteracted by a heat-sensitive

expandable lead screw expanding to increase
the length of the grating in the optical fiber
and thus adjust the wavelength of the output
light from the optical resonator composed of
5 the semiconductor light emitting device and
the optical fiber.